

Axial Strain, %

Specimen No.	1	
Unconfined strength, psf	2963.6	
Undrained shear strength, psf	1481.8	
Failure strain, %	12.3	
Strain rate, in./min.	0.058	
Water content, %	31.7	
Wet density, pcf	113.8	
Dry density, pcf	86.4	
Saturation, %	88.6	
Void ratio	0.9800	
Specimen diameter, in.	1.388	
Specimen height, in.	2.930	
Height/diameter ratio	2.11	

Description: ST GR & T CH3 W/LNS & LYS ML, RT

LL =	PL =	PI =	Assumed GS= 2.74	Type: UNDISTURBED

Project No.: 19082

Date: 11-8-05 Remarks:

Figure 1

TORVANE = 0.925 TSF

Client: URS Corporation

Project: U.S. Army Corps of Engineers Inner Harbor Navigational Canal

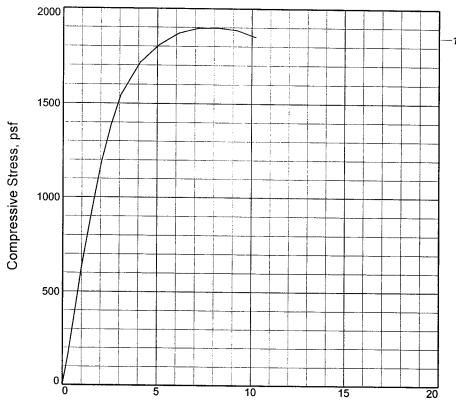
Source of Sample: B-7WG Depth: 0.0

Sample Number: 1

UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

Tested By: ZH	Checked By: JS
rested by: ZII	Checked by: 15



Axial	Strain,	%
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Specimen No.	1	
Unconfined strength, psf	1898.1	
Undrained shear strength, psf	949.1	
Failure strain, %	8.2	
Strain rate, in./min.	0.058	
Water content, %	55.7	
Wet density, pcf	102.5	
Dry density, pcf	65.8	
Saturation, %	95.4	
Void ratio	1.5994	
Specimen diameter, in.	1.388	
Specimen height, in.	2.930	
Height/diameter ratio	2.11	

Description: M GR & T CH4 W/ TR-WD

LL = PL = PI = Assumed GS = 2.74 Type: UNDISTURBED

Project No.: 19082

Date: 11-8-05

Remarks: TORVANE = 0.750 TSF

Client: URS Corporation

Project: U.S. Army Corps of Engineers Inner Harbor Navigational Canal

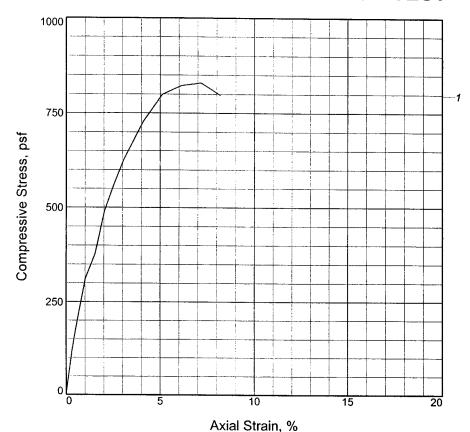
Source of Sample: B-7WG Depth: 2.5

Sample Number: 2

UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

Figure 1



Specimen No.	1	
Unconfined strength, psf	829.3	
Undrained shear strength, psf	414.7	
Failure strain, %	7.2	
Strain rate, in./min.	0.058	
Water content, %	68.9	
Wet density, pcf	97.6	
Dry density, pcf	57.8	
Saturation, %	96.3	
Void ratio	1.9602	
Specimen diameter, in.	1.388	
Specimen height, in.	2.930	

Description: SO GR & DGR CH4 W/LNS SM, WD

LL = PL = PI = Assumed GS = 2.74 Type: UNDISTURBED

Project No.: 19082

Height/diameter ratio

Date: 11-8-05

Remarks:

TORVANE = 0.380 TSF

Client: URS Corporation

2.11

Project: U.S. Army Corps of Engineers Inner Harbor Navigational Canal

Source of Sample: B-7WG Depth: 5.0

Sample Number: 3

UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

Figure 1

Tested By: ZH

UNCONFINED COMPRESSION TEST 200 150 Compressive Stress, psf 50

Axial Strain, %

Specimen No.	1	
Unconfined strength, psf	134.6	
Undrained shear strength, psf	67.3	
Failure strain, %	13.3	
Strain rate, in./min.	0.059	
Water content, %	117.3	
Wet density, pcf	84.5	
Dry density, pcf	38.9	
Saturation, %	95.5	
Void ratio	3.2534	
Specimen diameter, in.	1.388	,
Specimen height, in.	2.930	
Height/diameter ratio	2.11	

Description: VSO DGR & GR CHOB W/ WD

LL = PI = **Assumed GS=** 2.65 Type: UNDISTURBED

Project No.: 19082

Date: 11-8-05

Remarks:

Client: URS Corporation

Project: U.S. Army Corps of Engineers Inner Harbor Navigational Canal

Source of Sample: B-7WG **Depth:** 7.5

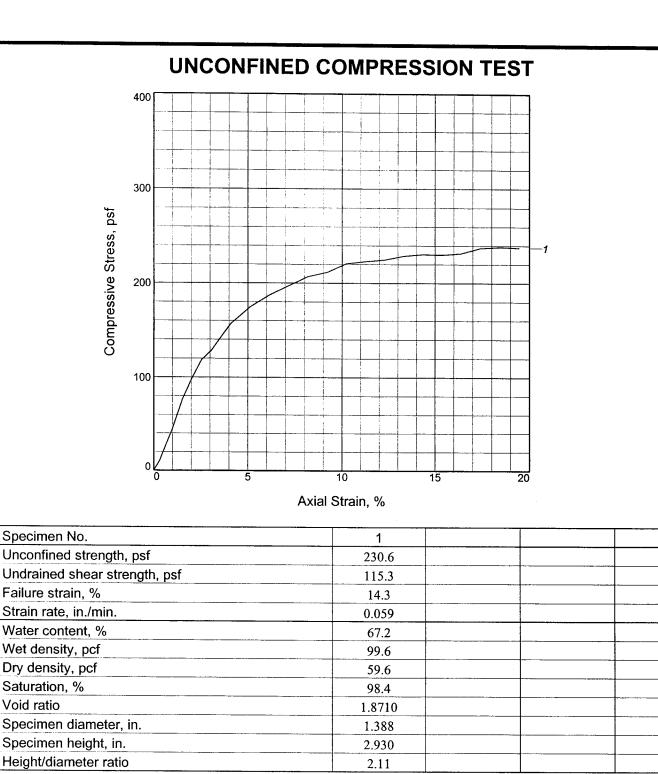
Sample Number: 4

UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

Figure 1

Tested By: ZH



Description: VSO GR CH4 W/ LNS ML, RT

LL = PL = PI = Assumed GS= 2.74 Type: UNDISTURBED

Project No.: 19082

Date: 11-8-05

Remarks:

Figure 1

Void ratio

Client: URS Corporation

Project: U.S. Army Corps of Engineers Inner Harbor Navigational Canal

Source of Sample: B-7WG

Sample Number: 6

Depth: 12.5

UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

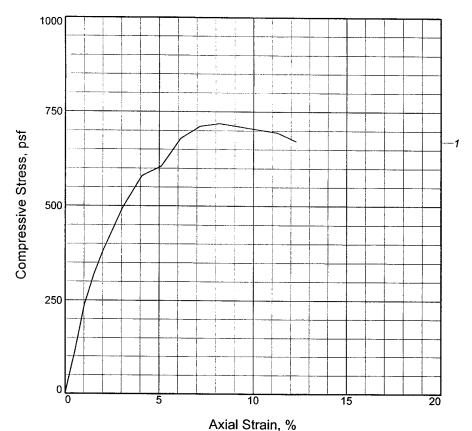
UNCONFINED COMPRESSION TEST 600 450 Compressive Stress, psf 150 Axial Strain, % Specimen No. Unconfined strength, psf 488.2 Undrained shear strength, psf 244.1 Failure strain, % 12.3 Strain rate, in./min. 0.059 Water content, % 52.4 Wet density, pcf 103.6 Dry density, pcf 68.0 Saturation, % 95.1 Void ratio 1.4975 Specimen diameter, in. 1.388 Specimen height, in. 2.930 Height/diameter ratio 2.11 **Description:** VSO GR CH4 W/ ARS SM LL = PL = PI = **Assumed GS=** 2.72 Type: UNDISTURBED Project No.: 19082 **Client:** URS Corporation **Date:** 11-8-05 Project: U.S. Army Corps of Engineers Remarks: Inner Harbor Navigational Canal TORVANE = 0.200 TSF**Source of Sample:** B-7WG **Depth:** 27.5 Sample Number: 12

Tested By: ZH Checked By: JS

Figure 1

UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.



Specimen No.	1	
Unconfined strength, psf	718.6	
Undrained shear strength, psf	359.3	
Failure strain, %	8.2	
Strain rate, in./min.	0.058	
Water content, %	61.2	
Wet density, pcf	98.0	
Dry density, pcf	60.8	
Saturation, %	92.5	
Void ratio	1.8137	
Specimen diameter, in.	1.388	
Specimen height, in.	2.930	
Height/diameter ratio	2.11	

Description: SO GR CH4 W/ LNS SM

LL = PL = PI = Assumed GS = 2.74 Type: UNDISTURBED

Project No.: 19082

Date: 11-8-05

Remarks:

Figure 1

TORVANE = 0.230 TSF

Client: URS Corporation

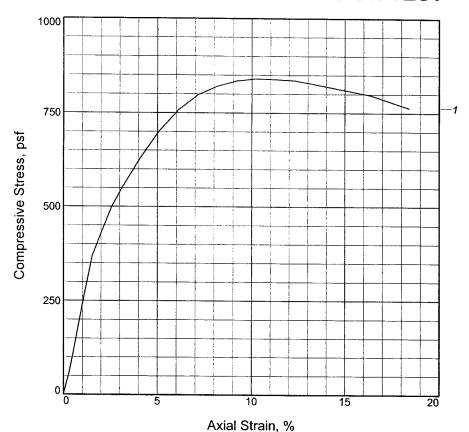
Project: U.S. Army Corps of Engineers Inner Harbor Navigational Canal

Source of Sample: B-7WG Depth: 32.5

Sample Number: 14

UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.



Specimen No.	1	
Unconfined strength, psf	840.1	
Undrained shear strength, psf	420.0	
Failure strain, %	10.2	
Strain rate, in./min.	0.058	
Water content, %	74.1	
Wet density, pcf	95.1	
Dry density, pcf	54.7	
Saturation, %	95.3	
Void ratio	2.1299	
Specimen diameter, in.	1.388	
Specimen height, in.	2.930	
Height/diameter ratio	2.11	

Description: SO GR CH4 W/LNS SM, SL

LL = PL = PI = Assumed GS = 2.74 Type: UNDISTURBED

Project No.: 19082

Date: 11-8-05

Remarks: TORVANE = 0.260 TSF Client: URS Corporation

Project: U.S. Army Corps of Engineers Inner Harbor Navigational Canal

Source of Sample: B-7WG Depth: 37.5

Sample Number: 16

UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

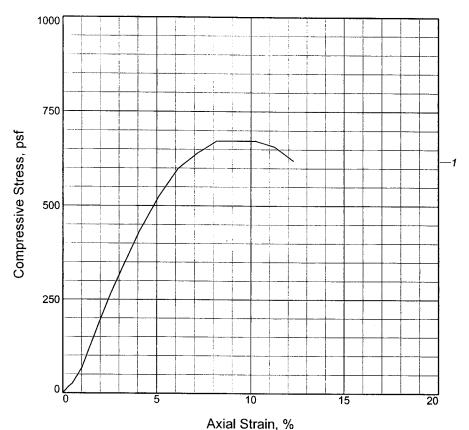
Figure 1

UNCONFINED COMPRESSION TEST 1000 750 Compressive Stress, psf 500 250 Axial Strain, % Specimen No. 1 Unconfined strength, psf 846.6 Undrained shear strength, psf 423.3 Failure strain, % 16.4 Strain rate, in./min. 0.058 Water content, % 72.8 Wet density, pcf 95.4 Dry density, pcf 55.2 Saturation, % 95.1 Void ratio 2.0969 Specimen diameter, in. 1.388 Specimen height, in. 2.930 Height/diameter ratio 2.11 Description: SO GR CH4 W/SL LL = PL = PI = Assumed GS= 2.74 Type: UNDISTURBED Project No.: 19082 **Client:** URS Corporation **Date:** 11-8-05 Project: U.S. Army Corps of Engineers Remarks: TORVANE = 0.300 TSFInner Harbor Navigational Canal Source of Sample: B-7WG **Depth:** 42.5 Sample Number: 18 **UNCONFINED COMPRESSION TEST**

Tested By: JL Checked By: JS

EUSTIS ENGINEERING COMPANY, INC.

Figure 1



Specimen No.	1	
Unconfined strength, psf	672.0	
Undrained shear strength, psf	336.0	
Failure strain, %	9.2	
Strain rate, in./min.	0.058	
Water content, %	41.9	
Wet density, pcf	109.0	
Dry density, pcf	76.8	
Saturation, %	94.3	
Void ratio	1.2103	
Specimen diameter, in.	1.388	
Specimen height, in.	2.930	
Height/diameter ratio	2.11	

Description: SO GR CH3 W/LNS & LYS SM, SIF

LL = PL = PI = Assumed GS = 2.72 Type: UNDISTURBED

Project No.: 19082

Date: 11-8-05 Remarks:

TORVANE = 0.310 TSF

Client: URS Corporation

Project: U.S. Army Corps of Engineers Inner Harbor Navigational Canal

Source of Sample: B-7WG Depth: 47.5

Sample Number: 20

UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

Figure 1

Tested By: JL

Axial Strain, %

Specimen No.	1	
Unconfined strength, psf	976.4	
Undrained shear strength, psf	488.2	
Failure strain, %	8.2	
Strain rate, in./min.	0.058	
Water content, %	31.8	
Wet density, pcf	116.1	
Dry density, pcf	88.1	
Saturation, %	94.0	
Void ratio	0.9132	
Specimen diameter, in.	1.388	
Specimen height, in.	2.930	
Height/diameter ratio	2.11	

Description: SO GR CL5 W/ ARS CH

LL = PL = PI = Assumed GS = 2.70 Type: UNDISTURBED

Project No.: 19082

Date: 11-8-05 Remarks:

TORVANE = 0.420 TSF

Client: URS Corporation

Project: U.S. Army Corps of Engineers Inner Harbor Navigational Canal

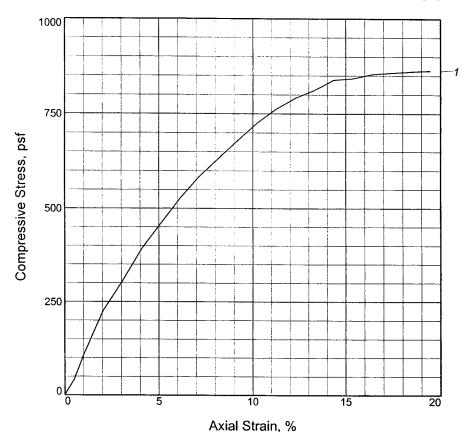
Source of Sample: B-7WG Depth: 52.5

Sample Number: 22

UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

Figure 1



Specimen No. 1 Unconfined strength, psf 863.5 Undrained shear strength, psf 431.7 Failure strain, % 19.5 Strain rate, in./min. 0.058 Water content, % 44.4 Wet density, pcf 109.3 Dry density, pcf 75.6 Saturation, % 96.5 Void ratio 1.2615 Specimen diameter, in. 1.388 Specimen height, in. 2.930 Height/diameter ratio 2.11

Description: SO GR CH4 W/ LNS SM

LL = PL = PI = Assumed GS = 2.74 Type: UNDISTURBED

Project No.: 19082

Date: 11-8-05

Remarks:

TORVANE = 0.300 TSF

Client: URS Corporation

Project: U.S. Army Corps of Engineers Inner Harbor Navigational Canal

Source of Sample: B-7WG Depth: 62.5

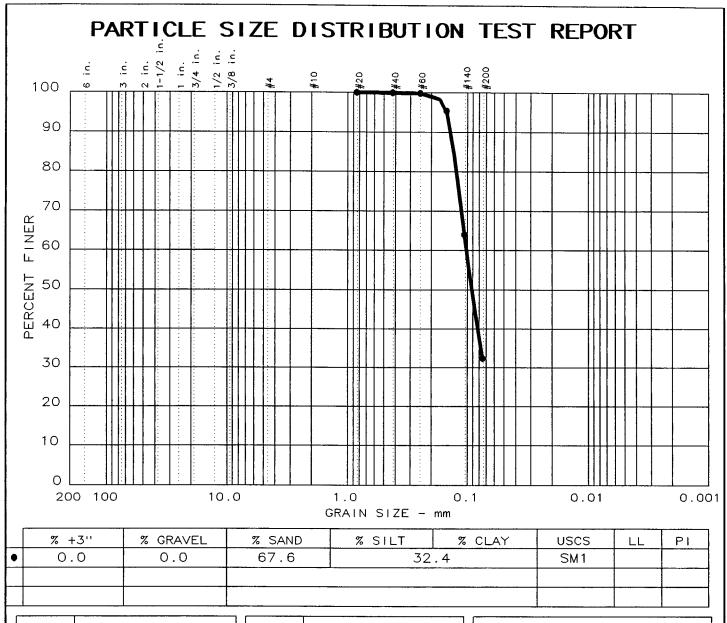
Sample Number: 26

UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

Figure 1

Tested By: ZH



	SIEVE	PERCENT FINER		
	inches size	•		
-	>	GRAIN SIZE		
	D ₆₀	0.10		
	^D 30			
	D ₁₀			
	$\geq \leq$	COEFFICIENTS		
	C c u			
ĺ	Cu			

SIEVE	PERCENT FINER		
number size	•		
20 40 60 100 140 200	100.0 99.9 99.8 95.4 64.1 32.4		
1			

Sample information:

Boring 7WG, Sample 9
GR SM1 W/ WD

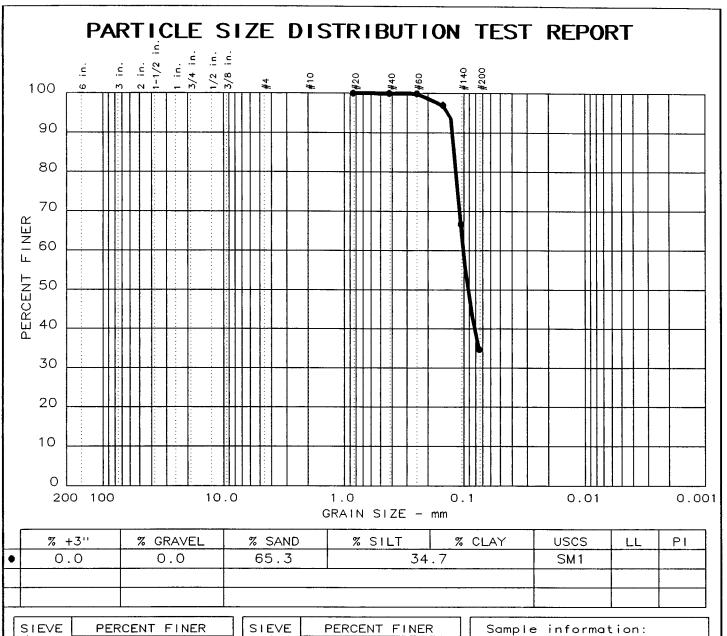
Remarks: Sample depth 20.0'

Eustis Engineering Company, Inc. Project No.: 19082

Project: USACE

Date: 11-15-05

Data Sheet No.



	SIEVE	PERCENT FINER		
	size	•		
l				
	>	GRAIN SIZE		
ſ	D ₆₀	0.10		
İ	D ₃₀			
	D ₁₀			
	><	COEFFICIENTS		
ſ	C			
	C c u			

SIEVE	PERCENT FINER		
number size	•		
20 40 60 100 140 200	100.0 99.9 99.8 97.0 66.8 34.7		

Boring 7WG, Sample 24GR SM1

Remarks: Sample depth 57.5'

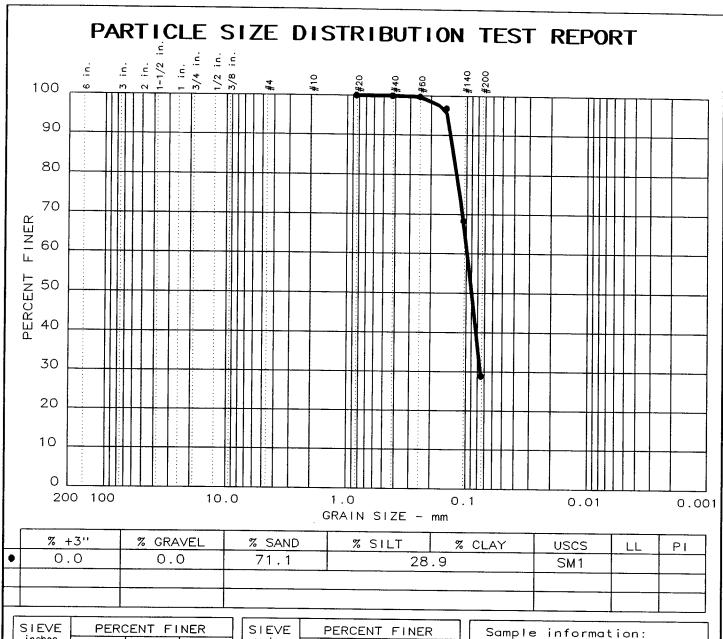
Eustis Engineering Company, Inc.

Project No.: 19082

Project: USACE

Date: 11-15-05

Data Sheet No.



SIEVE	PERCENT FINER		
inches size	•		
:			
$\geq \leq$	GRAIN SIZE		
D ₆₀	0.10		
30	0.08		
D ₁₀			
	COEFFICIENTS		
C c u			
l c l			
l u			

SIEVE	PERCENT FINER			
number size	•			
20 40 60 100 140 200	100.0 99.9 99.7 96.8 68.3 28.9			

Sample information: ●Boring 7WG,Sample 32 GR SM1

Remarks:

Sample depth 77.5'

Eustis Engineering Company, Inc.

Project No.: 19082

Project: USACE

Date: 11-15-05

Data Sheet No.